

## Vehicle Recovery System and Method

I claim:

- [c1] A vehicle recovery system comprising:
- a vehicle alarm detectable external to the vehicle for signaling that the vehicle is being misappropriated;
  - an alarm discharge apparatus for discharging the vehicle alarm;
  - a misappropriation signal for communicating to the alarm discharge apparatus that the vehicle is being misappropriated;
  - a public response system for reporting a detection of the vehicle alarm;
  - and a recovery service agency for directing recovery of the vehicle.
- [c2] The vehicle recovery system of claim [c1] wherein the alarm discharge apparatus comprises:
- a recovery processor for implementing a recovery action;
  - a misappropriation signal handler for processing the misappropriation signal wherein the misappropriation signal handler provides input to the recovery processor; and
  - a trigger apparatus for triggering the vehicle alarm wherein the recovery processor activates the trigger apparatus thus discharging the vehicle alarm.
- [c3] The vehicle recovery system of claim [c2] wherein the misappropriation signal handler comprises a receiver for receiving an external recovery signal.
- [c4] The vehicle recovery system of claim [c3] wherein the external recovery signal receiver is a radio receiver operating in unlicensed frequency spectrum.
- [c5] The vehicle recovery system of claim [c2] wherein the misappropriation signal handler comprises logic for generating an internal recovery signal.
- [c6] The vehicle recovery system of claim [c2] wherein the recovery processor further comprises a vehicle shutoff system for disabling the vehicle whereby the vehicle

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shutoff system disables the vehicle close in time to discharging the vehicle alarm.

**[c7]** The vehicle recovery system of claim [c6] wherein the recovery processor further comprises a speed sensor for detecting the vehicle's speed whereby the vehicle shutoff system will only operate when the vehicle's speed is below some predetermined speed.

**[c8]** The vehicle recovery system of claim [c1] wherein the public response system comprises:

- a means for reporting an observance of the vehicle alarm and
- an incentive for encouraging a member of the public for reporting the approximate location of the vehicle alarm.

**[c9]** A vehicle recovery system comprising:

- a vehicle alarm detectable external to the vehicle for signaling that the vehicle is being misappropriated wherein the vehicle alarm is a smoke flare;
- an alarm discharge apparatus for discharging the smoke flare;
- a misappropriation signal for communicating to the alarm discharge apparatus that the vehicle is being misappropriated;
- a public response system for reporting a detection of the smoke flare; and
- a recovery service agency for directing recovery of the vehicle.

**[c10]** The vehicle recovery system of claim [c9] wherein the alarm discharge apparatus comprises:

- a misappropriation signal handler for processing a recovery required signal;
- a recovery processor for implementing a recovery action;
- a positioning apparatus for positioning the smoke flare; and
- a trigger apparatus for igniting the smoke flare wherein the recovery processor activates the trigger apparatus thus discharging the smoke flare.

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- [c11] The vehicle recovery system of claim [c10] wherein the misappropriation signal handler further comprising a receiver for receiving an external recovery signal.
- [c12] The vehicle recovery system of claim [c11] wherein the external recovery signal receiver is a radio receiver operating in unlicensed frequency spectrum.
- [c13] The vehicle recovery system of claim [c10] wherein the misappropriation signal handler further comprising logic for generating an internal recovery signal.
- [c14] The vehicle recovery system of claim [c10] further comprising a vehicle shutoff system for disabling the vehicle whereby the vehicle shutoff system disables the vehicle close in time to discharging the smoke flare.
- [c15] The vehicle recovery system of claim [c14] further comprising a speed sensor for detecting the vehicle's speed whereby the vehicle shutoff system will only operate when the vehicle's speed is below some predetermined speed.
- [c16] The vehicle recovery system of claim [c10] further comprising an enclosure sensor for detecting whether the vehicle is enclosed whereby the smoke flare will be discharged only if the vehicle is not enclosed.
- [c17] The vehicle recovery system of claim [c9] wherein the public response system comprises:
  - a means for reporting an observance of the smoke flare and
  - an incentive for encouraging a member of the public for reporting the approximate location of the smoke flare.
- [c18] A vehicle recovery method comprising:
  - discharging a vehicle alarm for signaling that a vehicle is being misappropriated, said vehicle alarm being highly detectable from outside the vehicle wherein detection of the vehicle alarm does not require line of sight to the

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**vehicle;**

**educating the public that there is an incentive to reporting a detection of the vehicle alarm;**

**providing a communications means to a recovery service agency for reporting the detection of the vehicle alarm; and**

**the recovery service agency coordinating the recovery of the vehicle.**

**[c19] The vehicle recovery method of claim [c18] wherein the vehicle alarm is a smoke flare.**

**[c20] The vehicle recovery method of claim [c18] further comprising the vehicle transmitting a signal to the recovery service agency indicating that the vehicle is being misappropriated.**

**[c21] The vehicle recovery method of claim [c18] further comprising a recovery service agency subscriber communicating to the recovery service agency that a recovery service agency subscriber's vehicle has been misappropriated.**

**[c22] The vehicle recovery method of claim [c18] further comprising the recovery service agency transmitting an external recovery signal to the vehicle.**